PTO/SB/05 (2/98) Approved for use through 09/30/2000. OMB 0651-0032

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## UTILITY PATENT APPLICATION **TRANSMITTAL**

Attorney Docket No. 4015-955 First Inventor or Application Identifier Hans Carlsson

WIRELESS NETWORK ARCHITECTURE AND PROTOCOL Title FOR LOCATION SERVICES IN GPRS PACKET DATA **NETWORK** 

| (Or                   | aly for i | new nonprov   | isional applications under 37 CFR § 1.5   | (3(b)) Express                                   | Mail i           | Label No                     | . EL659   | 734113US  |  |                         |   |
|-----------------------|-----------|---|---|--|------------------|------------------------------|---|---|--|-------------------------|---|
|                       | See       |   | APPLICATION ELEMENTS er 600 concerning utility patent applicate   | ion contents.                                    |                  | ADi                          | DRESS TO:   | Assistant Comm<br>Box Patent Appl<br>Washington, DC   |  | ents<br>OL d            |   |
| 1.                    |           | (Submit at<br>Specificat<br>(preferred<br>— Descrip<br>— Cross I<br>— Statem<br>— Refered                   | arrangement set forth below)  otive title to the Invention  References to Related Applications  ent Regarding Fed sponsored R &  nce to Microfiche Appendix   | 27]  | 6.<br>7.         | Nucleotii (if applic a.      | de and/or Am<br>able, all nece<br>Computer F<br>Paper Copy<br>Statement | outer Program (Anino Acid Sequencessary) Readable Copy y (identical to converifying identity of the program of | ce Submission  nputer copy)  of above copies | 10997 U.S.<br>09/887630 |   |
| •                     |           | <ul><li>Brief Some Brief Domesting</li><li>Detaile</li><li>Claim(some Brief Some Brief Domesting)</li></ul> | ound of the Invention ummary of the Invention escription of the Drawings (if filed) d Description s) ct of the Disclosure   |  | 9.<br>10.<br>11. | 37 (wh                       | C.F.R. § 3.73<br>nen there is a   | ion Document (if<br>losure  | Power of A                                   | Attorney                |   |
| <sup>-</sup> 3.<br>4. | a.        | Oath or Newl  | (35 U.S.C. 113) [Total Sheets Declaration [Total Pages by executed (original or copy) from a prior application (37 C.F.F.   | 4]   | 12.<br>13.       | Ref                          | liminary Ame<br>turn Receipt I<br>nould be spec<br>nall Entity          | Postcard (MPEP iffically itemized)  | 503)<br>filed in prior ap                    | plication.              | 9 |
|                       | U.        | i.  | continuation/divisional with Box 17 [Note Box 5 below]  DELETION OF INVENTOR(S)  Signed statement attached deletininventor(s) named in the prior app  | completed)  ng lication,                         | 15.              | Sta                          | tement(s)<br>rtified Copy o<br>foreign priority                         | Status still<br>f Priority Docume   | proper and des<br>ent(s)                     |                         |   |
| 5.                    |           | Incorporate The entire copy of the is consider  | see 37 C.F.R. §§ 1.63(d)(2) and 1 tion By Reference (useable if Box e disclosure of the prior application e oath or declaration is supplied unred as being part of the disclosure bying application and is hereby incomplete. | 4b is checked), from which a nder Box 4b, of the |                  | ENTITL<br>ENTITY<br>§ 1.27), | ED TO PAY S<br>STATEMEN<br>EXCEPT IF                                    | 1 <u>&amp; 14</u> : IN ORDE<br>SMALL ENTITY F<br>T IS REQUIRED<br>ONE FILED IN A<br>ELIED UPON (37  | FEES, A SMALL<br>(37 C.F.R.<br>PRIOR         |                         |   |
| 17.                   | . If a    | CONTINUII Continu   | NG APPLICATION, check appropriation Divisional  | iate box and sup<br>Continuation-ir<br>aminer:   |                  |                              |   | olication No:   |  | ent:                    | _ |
|                       |           |   | 18  | B. CORRESPO                                      | NDENC            | E ADDRI                      | ESS   |   |  |                         |   |
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| NA                    | ME        |   |   | PATENT TRADE                                     | MARK OF          | FICE                         |   |   |  |                         |   |
| AD                    | DRES      | ss  |   |  |                  |                              |   |   |  |                         |   |
| CIT                   | ΓΥ        |   | · ·   |  | STATI            | E                            |   | ZIP CODE  |  |                         |   |
| CC                    | UNT       | RY  |   | TELE   | PHON             | E                            |   | FAX   |  |                         |   |
|                       |           | int/Type)   | John R. Owen  |  |                  | Regis                        | tration No. (Atto   |   | 42,055                                       |                         |   |
| Sign                  | nature    |   | Alm Man   | •  |                  |                              |   | Date  | June 22, 2001                                |                         |   |

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PTO/SB/17 (2/98)

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| FEE TRANSMITTAL   |                      | Complete if Known |
|---|----------------------|-------------------|
| Patent fees are subject to annual revision on October 1                     | Application Number   | TBA               |
| These are the fees effective December 29, 1999.                             | Filing Date          | ТВА               |
| Small Entity payments <u>must</u> be supported by a small entity statement. | First Named Inventor | Hans Carlsson     |
| otherwise large entity fees must be paid. See Forms PTO/SB/09-12.           | Examiner Name        | ТВА               |
| See 37 C.F.R. §§ 1.27 and 1.28.   | Group Art Unit       | ТВА               |
| TOTAL AMOUNT OF PAYMENT (\$)910.00  | Attorney Docket No.  | 4015-955          |

|   | METHO         | D OF                 | PAYMENT (check                                 | one)                 | FEE CALCULATION (continued) |                 |            |               |   |                      |  |
|---|---------------|----------------------|--|----------------------|-----------------------------|-----------------|------------|---------------|---|----------------------|--|
|   |               |                      | <b>-</b>                                       |                      | 3. ADDITIONAL FEES          |                 |            |               |   |                      |  |
| The Commission is hereby authorized to charge indicated fees and credit any over payments to: |               | Large<br>Fee<br>Code | Entity<br>Fee<br>(\$)                          | Small<br>Fee<br>Code |                             | Fee Description | Fee Paid   |               |   |                      |  |
| Deposit<br>Account<br>Number  | 18-1167       |                      | 1.5° 50 10 10 10 10 10 10 10 10 10 10 10 10 10 |                      | 105<br>127                  | 130<br>50       | 205<br>227 | 65<br>25      | Surcharge - late filing fee or oath<br>Surcharge - late provisional filing fee                      |                      |  |
| Denesit   |               |                      |  |                      | '-'                         |                 |            | 20            | or cover sheet  |                      |  |
| Deposit<br>Account  | Coats & B     | Bennett. F           | P.L.L.C.                                       |                      | 139                         | 130             | 139        | 130           | Non-English specification   |                      |  |
| Name  |               |                      |  |                      | 147<br>112                  | 2,520<br>920*   | 147<br>112 | 2,520<br>920* | For filing a request for reexamination<br>Requesting publication of SIR prior<br>to Examiner action |                      |  |
| Fee Required  |               |                      | 37 CFR §1.18 at the M                          |                      | 113                         | 1,840*          | 113        | 1,840*        | Requesting publication of SIR after Examination action  |                      |  |
| 37 CFR  | §§1.16 and    | 1.17                 | Notice of A                                    | lowance              | 115                         | 110             | 215        | 55            | Extension for reply within first month  |                      |  |
| 22 ⊠ P  | ayment Enc    | osed:                |  |                      | 116                         | 380             | 216        | 190           | Extension for reply within second month   |                      |  |
| Y   | heck          | 7                    | Money Order                                    | Other                | 117                         | 870             | 217        | 435           | Extension for reply within third month  | <u> </u>             |  |
| - TITE  | neck _        |                      |  | Other                | 118                         | 1,360           | 218        | 680           | Extension for reply within fourth month   |                      |  |
| <u> </u>  |               |                      | CALCULATION                                    |                      | 128                         | 1,850           | 228        | 925           | Extension for reply within fifth month  | $\vdash$             |  |
|   | FILING FE     |                      |  |                      | 119<br>120                  | 300<br>300      | 219<br>220 | 150<br>150    | Notice of Appeal Filing a brief in support of an appeal   | $\vdash$             |  |
|   | •             | Entity               |  |                      | 121                         | 260             | 221        | 130           | Request for oral hearing  | $\vdash \vdash \mid$ |  |
| Fee Fee   |               | Fee                  | Fee Description                                | Fee Paid             | 138                         | 1,510           | 138        | 1,510         | Petition to institute a public use proceeding   | $\vdash$             |  |
| <b>Code (\$)</b>  | Code<br>0 201 | ( <b>\$)</b><br>345  | Utility filing fee                             | 710.00               | 140                         | 110             | 240        | 55            | Petition to revive - unavoidable  |                      |  |
| 101 69<br>406 31  |               | 345<br>155           | , ,  | 710.00               | 141                         | 1,210           | 241        | 605           | Petition to revive - unintentional  |                      |  |
| 07 48   |               | 240                  |  |                      | 142                         | 1,210           | 242        | 605           | Utility issue fee (or reissue)  |                      |  |
| 108 76  |               | 380                  |  |                      | 143                         | 430             | 243        | 215           | Design issue fee  |                      |  |
| # 114 15  |               | 75                   | Provisional filing fe                          | e                    | 144                         | 580             | 244        | 290           | Plant issue fee   |                      |  |
|   |               |                      | SUBTOTAL (1)                                   |                      | 122                         | 130             | 122        | 130           | Petitions to the Commissioner   |                      |  |
| <u>ci</u>   |               |                      | SODIOTAL (1)                                   | (ψ)110.00            | 123                         | 50              | 123        | 50            | Petitions related to provisional applications   | $\vdash$             |  |
|   | CLAIM F       | ES                   |  |                      | 126                         | 240             | 126        | 240           | Submission of Information Disclosure Stmt.  | $\vdash$             |  |
| Tel   | OLMIN I       |                      | Fee from                                       | n                    |                             |                 |            |               |   | 40.00                |  |
|   |               | E                    | Extra Claims below                             | Fee Paid             | 581                         | 40              | 581        | 40            | Recording each patent assignment per property (times number of properties)                          | 40.00                |  |
| Total Claims  | 20<br>5       | -20**<br>-3**        |  | = 0<br>= 160.00      | 146                         | 760             | 246        | 380           | Filing a submission after final rejection (37 CFR 1.129(a))   |                      |  |
| Claims  |               |                      |  | ,                    | 149                         | 760             | 249        | 380           | For each additional invention to be   |                      |  |
| Multiple Depe   |               |                      | ×  | <b>┦</b> ╒ └────     |                             |                 |            |               | examined (37 CFR 1.129(b))  |                      |  |
| Large Entit   |               | aid, if gre          | eater; For Reissues, see                       | below                |                             |                 |            |               |   |                      |  |
| Fee Fee   | Fee           | Fee                  | Fee Descri                                     | ntion                | Other fe                    | ee (specify     | )          |               |   |                      |  |
| Code (\$)   | Code          | (\$)                 | 100 0000                                       | ption                |                             | ( )             | _          |               |   |                      |  |
| 103 18  |               | (*)<br>9             | Claims in excess of 20                         |                      | Other f                     | ee (specify     | ١          |               |   |                      |  |
| 103 16  |               | 39                   | Independent claims in                          | avenues of 3         | ""                          | oo (opcony      | ′ —        |               |   |                      |  |
|   |               |                      | •  |                      | 1                           |                 |            |               |   |                      |  |
|   |               | 130                  | Multiple dependent cla                         |                      |                             |                 |            |               |   |                      |  |
| 109 78  | 209           | 39                   | **Reissue independent                          | ciairis              | *D-4 .                      |                 | - Filler S | Tan Dala      | CURTOTAL (2) (MA  | <u></u>              |  |
| l   | 045           | _                    | over original patent                           |                      | Heauc                       | ed by Basi      | c riling F | ee Paid       | SUBTOTAL (3) (\$)4  | 0.00                 |  |
| 110 18  | 210           | 9                    | **Reissue claims in exc                        |                      |                             |                 |            |               |   |                      |  |
|   |               |                      | and over original pater                        |                      |                             |                 |            |               |   |                      |  |
| _   |               |                      | SUBTOTAL (2)                                   | (\$)160.00           |                             |                 |            |               |   |                      |  |

| SUBMITTED BY             | <del>-                                    </del> | Complete (if applicable) |               |                            |         |
|--------------------------|--|--------------------------|---------------|----------------------------|---------|
| Typed or<br>Printed Name | John R. Owen                                     |                          |               | Reg. Number                | 42,055  |
| Signature                | for the  | Date                     | June 22, 2001 | Deposit Account<br>User ID | 18-1167 |

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| In re Application of:  |  |
|--|--|
| Carlsson et al.  |  |
| Serial No  | Express Mail Certification   |
| Filed:   | Label No.EL659734113US   |
| For: WIRELESS NETWORK ARCHITECTURE () AND PROTOCOL FOR LOCATION SERVICES IN GPRS PACKET DATA NETWORK   | )<br>)<br>)  |
| Attorney's Docket No. P-4015.955   | )<br>  |
|  | Raleigh, North Carolina  |
|  | June 22, 2001  |
| BOX PATENT APPLICATION  Washington, D.C. 20231  Sir:  EXPRESS MAIL CERTIFIC  | CATE LABEL NO. EL659734113US   |
| DATE MAILE   | D: June 22, 2001   |
| (2 copies), specification and claims, drawings (1 secondaries), specification and claims, drawings (1 secondaries), and our Chec deposited with the United States Postal Service "E 37 C.F.R. §1.10 on the date indicated above and is | xpress Mail Post Office to Addressee" service under addressed to Commissioner for Patents, BOX |
| PATENT APPLICATION, Washington, D.C. 2023  | 1.   |
|  | Respectfully submitted,  |
|  | COATS & BENNETT, P.L.L.C.  |
| Ву   | <i>y</i> :   |

Registration No. 42,055

Telephone: (919) 854-1844





PTO/SB/17 (2/98)

Approved for use through 9/30/2000. OMB 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

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## Complete if Known FEE TRANSMITTAL **Application Number** TBA Patent fees are subject to annual revision on October 1 These are the fees effective December 29, 1999. Filing Date TBA Small Entity payments must be supported by a small entity statement. First Named Inventor Hans Carlsson otherwise large entity fees must be paid. See Forms PTO/SB/09-12. **Examiner Name TBA** See 37 C.F.R. §§ 1.27 and 1.28. Group Art Unit **TBA** TOTAL AMOUNT OF PAYMENT (\$)910.00 Attorney Docket No. 4015-955

| METHOD OF PAYMENT (check one)  | FEE CALCULATION (continued) |  |             |                   |  |  |
|--|-----------------------------|--|-------------|-------------------|--|--|
| The Commission is hereby authorized to charge indicated fees and credit any over payments to:  | 3.<br>Large<br>Fee          | Large Entity Small Entity<br>Fee Fee Fee Fee Fee Description |             |                   |  | Fee Paid   |
| Deposit<br>Account 18-1167<br>Number   | 105                         | (\$)<br>130  | Code<br>205 | <b>(\$)</b><br>65 | Surcharge - late filing fee or oath  |  |
| Deposit  | 127                         | 50   | 227         | 25                | Surcharge - late provisional filing fee or cover sheet                         |  |
| Account Coats & Bennett, P.L.L.C.  | 139<br>147                  | 130<br>2,520   | 139<br>147  | 130<br>2,520      | Non-English specification For filing a request for reexamination               |  |
| Charge Any Additional Charge the Issue Fee Set in  | 112                         | 920*   | 112         | 920*              | Requesting publication of SIR prior to Examiner action                         |  |
| Fee Required Under 37 CFR §1.18 at the Mailing of the 37 CFR §§1.16 and 1.17 Notice of Allowance   | 113                         | 1,840*   | 113         | 1,840*            | Requesting publication of SIR after<br>Examination action                      |  |
|  | 115                         | 110  | 215         | 55                | Extension for reply within first month   |  |
| 2. 🔀 Payment Enclosed:   | 116<br>117                  | 380<br>870   | 216<br>217  | 190<br>435        | Extension for reply within second month Extension for reply within third month |  |
| . Check Money Order Other  | 118                         | 1,360  | 217         | 435<br>680        | Extension for reply within fourth month  | $\vdash$   |
| FEE CALCULATION  | 128                         | 1,850  | 228         | 925               | Extension for reply within fifth month   | <u> </u>   |
|  | 119                         | 300  | 219         | 150               | Notice of Appeal   | $\vdash$   |
| 1. BASIC FILING FEE  | 120                         | 300  | 220         | 150               | Filing a brief in support of an appeal   | <del>                                     </del> |
| Large Entity Small Entity  | 121                         | 260  | 221         | 130               | Request for oral hearing   | $\vdash$   |
| Fee Fee Fee Fee Description Fee Paid   | 138                         | 1,510  | 138         | 1,510             | Petition to institute a public use proceeding                                  | <del></del>                                      |
| Code (\$) Code (\$)  | 140                         | 110  | 240         | 55                | Petition to revive - unavoidable   | $\vdash$   |
| 101 690 201 345 Utility filing fee 710.00  | 141                         | 1,210  | 241         | 605               | Petition to revive - unintentional   |  |
| 106 310 206 155 Design filing fee 107 480 207 240 Plant filing fee   | 142                         | 1,210  | 242         | 605               | Utility issue fee (or reissue)   |  |
| 107 480 207 240 Plant filing fee   | 143                         | 430  | 243         | 215               | Design issue fee   | <del>                                     </del> |
| 114 150 214 75 Provisional filing fee  | 144                         | 580  |             |                   |  | <b>├</b>   |
|  |                             |  | 244         | 290               | Plant issue fee  | <b></b> 1  |
| SUBTOTAL (1) (\$)710.00  | 122                         | 130  | 122         | 130               | Petitions to the Commissioner  |  |
|  | 123                         | 50   | 123         | 50                | Petitions related to provisional applications                                  | , , , , , , , , , , , , , , , , , , ,            |
| 2. EXTRA CLAIM FEES  | 126                         | 240  | 126         | 240               | Submission of Information Disclosure Stmt.                                     |  |
| Fee from<br>Extra Claims below Fee Paid  | 581                         | 40   | 581         | 40                | Recording each patent assignment per property (times number of properties)     | 40.00  |
| Total Claims 20 -20** = 0 X 18.00 = 0 160.00   | 146                         | 760  | 246         | 380               | Filing a submission after final rejection (37 CFR 1.129(a))                    |  |
| Claims   | 149                         | 760  | 249         | 380               | For each additional invention to be  |  |
| Multiple Dependent Claims X = =  |                             |  |             |                   | examined (37 CFR 1.129(b))   |  |
| Large Entity Small Entity Fee Fee Fee Fee Fee Description  | Other fe                    | e (specify)  | 1           |                   |  |  |
| Code (\$) Code (\$)  | 1                           | (speeny)   |             |                   |  |  |
| 1.1  | Other fo                    | e (specify)  |             |                   |  |  |
| •  | Curerie                     | e (specify)  |             |                   |  | لـــا  |
|  | 1                           |  |             |                   |  | ł  |
| The state of the s |                             |  |             |                   |  | 1  |
| 109 78 209 39 **Reissue independent claims   | l                           |  |             |                   |  |  |
| over original patent   | *Reduc                      | ed by Basi   | c Filing F  | ee Paid           | SUBTOTAL (3) (\$)4   | 0.00   |
| 110 18 210 9 "Reissue claims in excess of 20   |                             |  |             |                   |  |  |
| and over original patent   |                             |  |             |                   |  |  |
| SUBTOTAL (2) (\$)160.00  |                             |  |             |                   |  |  |
| · · · · · · · · · · · · · · · · · · ·  |                             |  |             |                   |  |  |

| SUBMITTED BY             |              | Comple      | ete (if applicable) |                            |         |
|--------------------------|--------------|-------------|---------------------|----------------------------|---------|
| Typed or<br>Printed Name | John R. Owen | Reg. Number | 42,055              |                            |         |
| Signature                | Jest Rom     | Date        | June 22, 2001       | Deposit Account<br>User ID | 18-1167 |

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